REMARKS

Claims 1-9, 11-18, and 21-30 remain in the application. Claims 10, 19 and 20 have been canceled and claims 4, 5, 9, 11, 12, 15, 16, 17, 18, 21, 22, and 25 have been amended herein. New claims 31-34 have been added. In view of the claim amendments and the following remarks, reconsideration of the application is respectfully requested.

Claim Rejections – 35 U.S.C. § 112

Claims 15, 16, and 19-24 were rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Claim 15 has been amended so that "the memory" has proper antecedent basis. Claim 16 is dependent on claim 15.

Applicant traverses the rejection to claim 19 based on the use of the word "approximate". An example of the meaning of the term is provided in the specification beginning on page 12, line 21. Applicant has nevertheless amended Claim 19 to remove the term "approximate" to overcome this rejection. It will be understood that where the claim refers to setting the state of the termination circuit based on the state of the bus, the claim will continue to mean that the state of the bus refers to any attribute of the bus, as the specification indicates. Thus for example, a non-selected memory device is not required to completely decode the address/command bus to be regarded as determining the state of the bus.

Claims 20-24 have been amended so that each "the state" in each claim has proper antecedent basis.

Claim Rejections – 35 U.S.C. § 102

Claim 15 was rejected under 35 U.S.C. § 102(b) as being anticipated by the acknowledged prior art of Figure 2. Claims 15-19, 24, 29, and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Klein, U.S. Patent No. 6,349,051 ("Klein"). Applicant respectfully traverses these rejections.

Regarding claim 15, Klein does not teach each and every element of the claimed invention. The claimed invention requires, "...wherein the READ command signals *identify* the memory unit currently being addressed." The meaning of the word *identify* requires active identification by the READ command signals (one example is in the specification page 9, line 10 "the memory controller embeds ... information that identifies the memory unit...).

The prior art did not actively identify the memory unit being addressed with the READ command signals, or identify the memory unit through the use of a command signal. Instead, the prior art used address signals or chip select signals to trigger the termination circuit. Klein does not show READ command signals *identifying* the memory unit being addressed. Furthermore, the claim has been amended to clarify that the READ command signals identify *to each memory unit* the memory unit currently being addressed. For similar reasons, the acknowledged prior art of Figure 2 does not anticipate claim 15.

Claim 16 is dependent on claim 15. Therefore, Klein does not teach each and every element of claim 16. Furthermore, Klein does not teach "...capable of generating address and command signals *to transfer termination configuration parameters* to memory units connected to the controller." In Klein, the decoder in the memory decodes the command signal to determine if termination should be enabled. Termination control parameters do not control the termination circuitry directly like the decoded commands (see page 7, lines 4-9 for a description of termination configuration parameters). Page 8, lines 5-21 refers to one example of termination control parameters. ONEDEV and DISABLE can cause the termination control circuitry to respond differently when a device is in the WRITE state than it otherwise would. By retransmitting different termination control parameters, the termination control circuitry could be caused to differently respond when a device is in the WRITE state, for example enabling termination control circuitry during the WRITE state.

Regarding claim 17, applicant traverses the examiner's rejection. Applicant has amended claim 17 to include the limitations of dependent claim 19 and dependent claim 20. Claim 20 was objected to but would be allowed if put in independent form. Since the limitations of claim 20 have been included in claim 17, claim 17 should now be allowable. Claim 19 has been canceled. Claim 20 has been canceled.

Claim 18 is dependent on claim 17. Therefore, Klein does not teach each and every element of claim 18.

Claim 24 is dependent on claim 17. Therefore, Klein does not teach each and every element of claim 24.

Regarding claim 29, Klein does not teach each and every element of the invention as claimed therein. Nothing in Klein discusses programming the decoder registers through the use of the processor. Thus, Klein does not teach executing instructions by a processor to transfer a register value to a termination register to indicate conditions under which the memory unit should enable and/or disable a data bus line termination circuit.

Regarding claim 30, Klein does not teach each and every element of the invention for at least the reason given for claim 29. Additionally, Klein does not teach evaluating the number of memory units present on the data bus, and selecting the register value for the memory units according to the number of units present.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 4, 5, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Klein in view of the acknowledged prior art of Figure 2. Claims 9, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Klein in view of the acknowledged prior art of Figure 2. Applicant respectfully traverses these rejections and respectfully submits that the combination of references fails to create a *prima facie* case of obviousness.

The prior art does not teach or suggest each and every element of claim 1. Claim 1 requires "...termination control logic to set the state of the termination circuitry according to decoded commands received on the address/command bus." Although a single bus can be used to transfer both addresses and commands, the recited limitation requires the termination control logic to set the state of the termination circuitry solely based on commands. This is different from the prior art where termination control logic also requires address and/or a chip select signals to set the state of termination circuitry. Therefore, a combination of Klein and Figure 2 does not teach or suggest at least the recited limitation.

Regarding claim 4 and claim 5, the prior art does not teach each and every element of the claimed invention for at least the same reasons as presented above for claim 1. Additionally, the prior art does not teach a memory controller capable of transmitting termination control parameters. Termination control parameters do not control the termination circuitry directly like the decoded commands, but instead describe how memory is to respond when it receives a later command (see, e.g., page 7, lines 4-9 for a description of termination configuration parameters).

Claim 25 has been amended to clarify that a read or write command indicates the target of the command. This is different from the prior art where termination control logic requires address and/or a chip select signals to set the state of termination circuitry. Therefore, a combination of Klein and Figure 2 does not teach or suggest at least the recited limitation. Furthermore, the prior art fails to teach each memory unit decoding the command and setting its termination circuitry accordingly, as claimed.

Claim 26 is dependent on claim 25. Additionally, the prior art does not teach a memory controller capable of transmitting termination control parameters. Termination control parameters do not control the termination circuitry directly like the decoded commands (see page 7, lines 4-9 for a description of termination configuration parameters).

Claim 9 has been amended to include the limitations of allowable claim 10. Therefore, the prior art does not teach or suggest each and every element of amended claim 9 for at least the reason of the inclusion of the limitations of claim 10. Claim 10 has been canceled.

Claim 12 has been amended to place it into independent form. The prior art does not teach a register to store parameters for use by the termination control logic, wherein the parameters are capable of being set through the command port. Nothing in Klein nor figure 2 shows or suggests a decoder capable of being reprogrammed via the command port. Therefore, neither prior art reference teaches or suggests each and every element of claim 12.

Claims 13 and 14 depend from claim 12 and should therefore be allowed. Additionally, the prior art does not teach or suggest a disable parameter that forces the termination control logic to turn off the line termination circuit, wherein the parameters are capable of being set through the command port.

Allowable Subject Matter

Claims 2, 3, 6-8, 10, 11, 27, and 28 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2, 3, 6-8, 11, 27, and 28 all depend from claims for which Applicant has submitted a basis for allowability. Based on these arguments, Applicant has elected not to amend claims 2, 3, 6-8, 11, 27, and 28. Claim 10 has been canceled and its limitations copied into claim 9.

Claims 20-23 would be allowable if rewritten to overcome the rejections set forth under 35 U.S.C. § 112, second paragraph and to include all of the limitations of the base claim and any intervening claims.

Claim 17 has been amended to overcome the § 112 rejections, and should be allowed based on the arguments presented above. Claims 21-23 are dependent from claim 17 directly or indirectly. Claims 21-23 should therefore also be allowed. Claim 20 has been canceled.

New Claims

New claim 31 corresponds to former claim 12 and depends from claim 9. Claim 9 should be allowed, and therefore new claim 31 should also be allowed. New claims 32-34 should also be allowed.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-9, 11-18, and 21-34 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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